



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/588,184	03/17/2008	Stephan Wienand	3808	6727
278	7590	06/23/2011	EXAMINER	
MICHAEL J. STRIKER 103 EAST NECK ROAD HUNTINGTON, NY 11743				CHU, RANDOLPH I
ART UNIT		PAPER NUMBER		
		2624		
NOTIFICATION DATE			DELIVERY MODE	
06/23/2011			ELECTRONIC	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

striker@strikerlaw.com

Office Action Summary	Application No.	Applicant(s)
	10/588,184	WIENAND ET AL.
	Examiner	Art Unit
	RANDOLPH I. CHU	2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 17 March 2008.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-12 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-6 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Mattsson (US 2003/0076293).

With respect to claim 1, Mattsson teaches a method for determining the position of an object (markers) in space, in which measurement characteristics (reference position and movement) of the object (markers) are recorded with an optical recording device (Fig. 5 ref. label 53) calibrated to a space coordinate system (para [0094][0191]) (para [0001]), and on the basis of these measurement characteristics (reference position and movement), the position of the object in the space coordinate system is determined in an image processing device (para [0001], and [0007]-[0008]), characterized in that at least two measurement characteristics (reference position and movement) of the object (markers) are detected simultaneously in a recording device (Fig. 5 ref. label 53) and used to determine the position of the object (para [0001], and [0007]-[0008]).

With respect to claim 2, Mattsson teaches that at least three measurement characteristics from at least one recorded image are evaluated (Fig. 5, 51, 52 and 53)

With respect to claim 3, Mattsson teaches that the measurement characteristics are marked points (Fig. 5, ref. labels 51 and 52)

With respect to claim 4, Mattsson teaches that a plurality of recording devices are used (Fig. 5 ref label 53)

With respect to claim 5, Mattsson teaches that one measurement characteristic is reproduced in a plurality of recording devices (Table in para [0085]).

With respect to claim 6, Mattsson teaches that a stationary (Fig. 6 ref label 63). and/or movable recording device is used (Fig. 5 ref label 53).

With respect to claim 6, Mattsson teaches that the recording device (3) is positioned such that between visual rays which strike the recording device (3) and originate at different measurement characteristics (4) and are used to determine the position of the object (1), a large intermediate angle exists in each case (para [0024] and [0067]).

With respect to claim 11, Mattsson teaches that that before the method is employed, the coordinates of the measurement characteristics are learned in an object coordinate system, in that the object is recorded in a plurality of known positions by the recording device. (para. [0007]-[0008], reference position),

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

A. Claims 7 and 12 are rejected under 35 USC 103(a) as being unpatentable over Mattsson (US 2003/0076293) in view of Sabe et al. (US 2004/0013295).

With respect to claim 7, Mattsson teaches all the limitations of claim 6 as applied above from which claim 7 respectively depend.

Mattsson do not teaches expressly that a movable recording device (3), after a motion, the position of the recording device (3) in the space coordinate system (5) is determined.

Sabe et al. teaches a movable recording device (3), after a motion, the position of the recording device (3) in the space coordinate system (5) is determined. (Fig. 7, para [0062]).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to , the position of the recording device (3) in the space coordinate system in the method of Mattsson.

The suggestion/motivation for doing so would have been that in order to calculate relative position, camera coordinate system and system(space) coordinate need to be synchronized.

Therefore, it would have been obvious to combine Sabe et al. with Mattsson to obtain the invention as specified in claim 7.

With respect to claim 12, Sabe et al. teaches in that the selection of measurement characteristics to be detected by a recording device (3), the position of the recording device (3), and/or the focal length of the recording device (3) is determined automatically (Fig. 7, para [0062]).

B. Claims 9 and 10 are rejected under 35 USC 103(a) as being unpatentable over Mattsson (US 2003/0076293)

Mattsson teaches all the limitations of claim 8 as applied above from which claim 7 respectively depend.

Mattsson does not teach expressly that that the intermediate angle is between 10.degree. and approximately 170.degree. and that the recording device (3) is positioned and/or arranged such that as large an intermediate angle as possible exists in each case.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to set that the intermediate angle is between 10 degree and approximately 170 degree and that the recording device is positioned and/or arranged such that as large an intermediate angle as possible exists in each case in the method of Mattsson.

Applicant has not disclosed that that the intermediate angle is between 10 degree and approximately 170 degree and that the recording device is positioned and/or arranged such that as large an intermediate angle as possible exists in each case provides advantage, is used for particular purpose, or solves stated problem. One of ordinary skill in the art, further more, would have expected Applicant's invention to perform equally well with any angle as long as the angle is not too large or too small.

Therefore, it would have been obvious to combine Sabe et al. with Mattsson to obtain the invention as specified in claims 9 and 10.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randolph Chu whose telephone number is 571-270-1145. The examiner can normally be reached on Monday to Thursday from 7:30 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vikkram Bali can be reached on 571-272-7415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/RANDOLPH I CHU/

Primary Examiner, Art Unit 2624